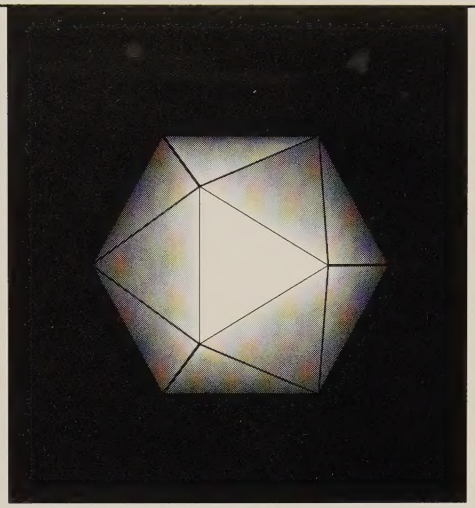
Volume 239, 1997



VIROLOGY

ACADEMIC PRESS

http://www.apnet.com

Copyright © 1997 by Academic Press

All Rights Reserved

No part of this publication may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopy, recording, or any information storage and retrieval system, without permission in writing from the Publisher. *Exceptions:* It is the policy of Academic Press that authors need not obtain permission in the following cases only: (1) to use their original figures or tables in their future works; (2) to make copies of their papers for use in their classroom teaching; and (3) to include their papers as part of their dissertations.

The appearance of the code at the bottom of the first page of an article in this journal indicates the Publisher's consent that copies of the article may be made for personal or internal use, or for the personal or internal use of specific clients. This consent is given on the condition, however, that the copier pay the stated per copy fee through the Copyright Clearance Center, Inc. (222 Rosewood Drive, Danvers, Massachusetts 01923), for copying beyond that permitted by Sections 107 or 108 of the U. S. Copyright Law. This consent does not extend to other kinds of copying, such as copying for general distribution, for advertising or promotional purposes, for creating new collective works, or for resale. Copy fees for pre-1997 articles are as shown on the article title pages; if no fee code appears on the title page, the copy fee is the same as for current articles.

0042-6822/97 $25.00

MADE IN THE UNITED STATES OF AMERICA

This journal is printed on acid-free paper.

Contents of Volume 239

Number 1, December 8, 1997

Animal Viruses

Single Serine Phosphorylation within the Acidic Domain of Chandipura Virus P Protein Regulates the Transcription *in Vitro* — Debasish Chattopadhyay, Tamal Raha, and Dhrubajyoti Chattopadhyay 11

Transformation of Primary Chick Embryo Fibroblasts by Marek's Disease Virus — Chantanee Buranathai, Jose Rodriguez, and Charles Grose 20

Formation of Cytomegalovirus DNA Replication Compartments Defined by Localization of Viral Proteins and DNA Synthesis — Mark E. T. Penfold and Edward S. Mocarski 46

Incomplete dsRNA Genomes in Purified Infectious Pancreatic Necrosis Virus — Scott Kordyban, Gabor Magyar, Hye Kyung Chung, and Peter Dobos 62

Identification of a Specific Interaction between the Coronavirus Mouse Hepatitis Virus A59 Nucleocapsid Protein and Packaging Signal — Richard Molenkamp and Willy J. M. Spaan 78

Patterns of Amino Acid Variability in NSI-like and SI-like V3 Sequences and a Linked Change in the CD4-Binding Domain of the HIV-1 Env Protein — Lynn Milich, Barry H. Margolin, and Ronald Swanstrom 108

Identification of the Functional Regions Required for Hepatitis D Virus Replication and Transcription by Linker-Scanning Mutagenesis of Viral Genome — Hsei-Wei Wang, Hui-Lin Wu, Ding-Shinn Chen, and Pei-Jer Chen 119

Reassessing the Organization of the UL42–UL43 Region of the Human Cytomegalovirus Strain AD169 Genome — Edward S. Mocarski, Mark N. Prichard, Charmain S. Tan, and Janice M. Brown 169

Expression, Purification, and Characterization of a Soluble Form of Human Cytomegalovirus Glycoprotein B — Chad Carlson, William J. Britt, and Teresa Compton 198

Gene Expression by Atypical Recombinant Ovine Adenovirus Vectors during Abortive Infection of Human and Animal Cells *in Vitro* — Aparajita Khatri, Zheng Zhou Xu, and Gerald W. Both 226

Plant Viruses

Novel Defective Interfering DNAs Associated with Ageratum Yellow Vein Geminivirus Infection of *Ageratum conyzoides* — John Stanley, Keith Saunders, Marion S. Pinner, and Sek Man Wong 87

Two Domains of the AL1 Protein Mediate Geminivirus Origin Recognition — Heather J. Gladfelter, Patricia A. Eagle, Elizabeth P. B. Fontes, LouAnn Batts, and Linda Hanley-Bowdoin 186

Virus–Cell Interactions

Integrin $\alpha v\beta 6$ Enhances Coxsackievirus B1 Lytic Infection of Human Colon Cancer Cells — Michael V. Agrez, Darren R. Shafren, Xinhua Gu, Karen Cox, Dean Sheppard, and Richard D. Barry 71

Destabilization of the RB Tumor Suppressor Protein and Stabilization of p53 Contribute to HPV Type 16 E7-Induced Apoptosis — D. Leanne Jones, David A. Thompson, and Karl Münger 97

A Comparative Analysis of the Interactions of the E6 Proteins from Cutaneous and Genital Papillomaviruses with p53 and E6AP in Correlation to Their Transforming Potential — M. Elbel, S. Carl, S. Spaderna, and T. Iftner 132

6 585HI XL 3481
12/99 31249-200 NULP

Specific Interactions between Human Integrin $\alpha_v\beta_3$ and Chimeric Hepatitis B Virus Core Particles Bearing the Receptor-Binding Epitope of Foot-and-Mouth Disease Virus — Amit Sharma, Zihe Rao, Elizabeth Fry, Timothy Booth, E. Yvonne Jones, David J. Rowlands, David L. Simmons, and David I. Stuart 150

Cleavage of Transcriptional Activator Oct-1 by Poliovirus Encoded Protease $3C^{pro}$ — Padmaja Yalamanchili, Kathy Weidman, and Asim Dasgupta 176

The Relative Ability of Human Papillomavirus Type 6 and Human Papillomavirus Type 16 E7 Proteins to Transactivate E2F-Responsive Elements Is Promoter- and Cell-Dependent — Deborah J. Armstrong and Ann Roman 238

Viral Pathogenesis and Immunity

Altered Pathogenesis of a Mutant of the Murine Coronavirus MHV-A59 Is Associated with a Q159L Amino Acid Substitution in the Spike Protein — Isabelle Leparc-Goffart, Susan T. Hingley, Ming Ming Chua, Xinhe Jiang, Ehud Lavi, and Susan R. Weiss 1

Equine Herpesvirus 1 Mutants Devoid of Glycoprotein B or M Are Apathogenic for Mice but Induce Protection against Challenge Infection — Antonie Neubauer, Martin Beer, Christine Brandmüller, Oskar-Rüger Kaaden, and Nikolaus Osterrieder 36

Characterization of Torovirus from Human Fecal Specimens — Lynn Duckmanton, Bo Luan, John Devenish, Raymond Tellier, and Martin Petric 158

Antigenicity and Vaccine Potential of Marburg Virus Glycoprotein Expressed by Baculovirus Recombinants — Michael Hevey, Diane Negley, Joan Geisbert, Peter Jahrling, and Alan Schmaljohn 206

$CD4^+$ T Cells Are Ineffective in Clearing a Pulmonary Infection with Influenza Type A Virus in the Absence of B Cells — Krystyna Mozdzanowska, Michelle Furchner, Krista Maiese, and Walter Gerhard 217

Author Index for Volume 239, Number 1 247

Number 2, December 22, 1997

Animal Viruses

Hormone Regulation of Bovine Leukemia Virus via the Long Terminal Repeat — Gemma L. Niermann and Gertrude Case Buehring 249

Complementation of Vaccinia Virus Deleted of the E3L Gene by Mutants of E3L — Teri Shors, Karen V. Kibler, Kim B. Perkins, Renee Seidler-Wulff, Matthew P. Banaszak, and Bertram L. Jacobs 269

A Major DNA Binding Protein Encoded by BALF2 Open Reading Frame of Epstein–Barr Virus (EBV) Forms a Complex with Other EBV DNA-Binding Proteins: DNAase, EA-D, and DNA Polymerase — Yué Zeng, Jaap Middeldorp, Jean-Jacques Madjar, and Tadamasa Ooka 285

Phylogenetic Analysis of the Human Papillomavirus Type 2 (HPV-2), HPV-27, and HPV-57 Group, Which Is Associated with Common Warts — Shih-Yen Chan, Sung-Hock Chew, Kiyofumi Egawa, Elke-Ingrid Grußendorf-Conen, Yumi Honda, Albert Rübben, Kong-Chong Tan, and Hans-Ulrich Bernard 296

Megalomicin Inhibits HIV-1 Replication and Interferes with gp160 Processing — Ester San José, M. Angeles Muñoz-Fernández, and Balbino Alarcón 303

The Effect of Herpes Simplex Virus Type 1 L-Particles on Virus Entry, Replication, and the Infectivity of Naked Herpesvirus DNA — D. J. Dargan and J. H. Subak-Sharpe 378

A New Class of Defective Hepatitis B Virus Genomes with an Internal Poly(dA) Sequence — Gunhild Sommer, Stephan Günther, Martina Sterneck, Stephanie Otto, and Hans Will 402

Plant Viruses

New Satellite RNAs, but No DI RNAs, Are Found in Natural Populations of Tomato Bushy Stunt Tombusvirus — Ana Celix, Emilio Rodriguez-Cerezo, and Fernando Garcia-Arenal 277

A Short Basic Domain Supports a Nucleic Acid-Binding Activity in the Rice Tungro Bacilliform Virus Open Reading Frame 2 Product — E. Jacquot, M. Keller, and P. Yot 352

Formation of Circular Satellite Tobacco Ringspot Virus RNA in Protoplasts Transiently Expressing the Linear RNA — Catherine A. Chay, Xia Guan, and George Bruening 413

Evidence That a Viral Replicase Protein Is Involved in the Disassembly of Tobacco Mosaic Virus Particles *in Vivo* — Xiaojie Wu and John G. Shaw 426

Virus–Cell Interactions

Efficient Virus Transmission from Dendritic Cells to $CD4^+$ T Cells in Response to Antigen Depends on Close Contact through Adhesion Molecules — Yasuko Tsunetsugu-Yokota, Sachiko Yasuda, Akira Sugimoto, Takenori Yagi, Miyuki Azuma, Hideo Yagita, Kiyoko Akagawa, and Toshitada Takemori 259

An Imperfect Correlation between DNA Replication Activity of Epstein–Barr Virus Nuclear Antigen 1 (EBNA1) and Binding to the Nuclear Import Receptor, Rch1/importin α — Arianna L. Kim, Maureen Maher, Jodi B. Hayman, Josef Ozer, Dennis Zerby, John L. Yates, and Paul M. Lieberman 340

Viral Pathogenesis and Immunity

Contributions of Antibody and T Cell Subsets to Protection Elicited by Immunization with a Replication-Defective Mutant of Herpes Simplex Virus Type 1 — Lynda A. Morrison and David M. Knipe 315

Proper Spacing between Heptad Repeat B and the Transmembrane Domain Boundary of the Paramyxovirus SV5 F Protein Is Critical for Biological Activity — Jie Zhou, Rebecca Ellis Dutch, and Robert A. Lamb 327

The Myxoma Virus M-T4 Gene Encodes a Novel RDEL-Containing Protein That Is Retained within the Endoplasmic Reticulum and Is Important for the Productive Infection of Lymphocytes — Michele Barry, Shawna Hnatiuk, Karen Mossman, Siow-Fong Lee, Lynn Boshkov, and Grant McFadden 360

Replicon-Helper Systems from Attenuated Venezuelan Equine Encephalitis Virus: Expression of Heterologous Genes *in Vitro* and Immunization against Heterologous Pathogens *in Vivo* — Peter Pushko, Michael Parker, George V. Ludwig, Nancy L. Davis, Robert E. Johnston, and Jonathan F. Smith 389

Author Index for Volume 239 435

Cumulative Author Index for Volumes 227–239 436